

**Claims**

1. Method of assessing the state of Alzheimer's disease in a subject comprising detection of at least one polypeptide comprised in a group of polypeptides  
5 having, respectively, molecular masses of  $4824 \pm 20$  Da, of  $7691 \pm 20$  Da, of  $11787 \pm 20$  Da, of  $11988 \pm 20$  Da, of  $13416 \pm 20$  Da, of  $4769 \pm 20$  Da, of  $6958 \pm 20$  Da, of  $6991 \pm 20$  Da, of  $13412 \pm 20$  Da, of  $13787 \pm 20$  Da, of  $17276 \pm 20$  Da, of  $40437 \pm 20$  Da, of  $6895 \pm 20$  Da, of  $6928 \pm 20$  Da, of  $7691 \pm 20$  Da, of  $7769 \pm 20$  Da, of  $7934 \pm 20$  Da, of  $5082 \pm 20$  Da, of  $6267 \pm 20$  Da, of  $6518 \pm 20$  Da, of  $7274 \pm 20$  Da, and of  $8209 \pm 20$  Da.  
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2. Method of claim 1 in which at least 2, or 3, or 4, or 5, or 10 or all polypeptides of said group of peptides are detected.
- 15 3. Method of assessing the state of Alzheimer's disease in a subject comprising detection of at least one polypeptide comprising the sequence of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16 and/or SEQ ID NO:17.  
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4. Method of assessing the state of Alzheimer's disease in a subject comprising detection of at least one polypeptide comprised in a group of polypeptides consisting of  
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  - i) human cystatin C,
  - ii) human beta-2-microglobulin,
  - iii) human myoglobin (new variant)
  - iv) neurosecretory protein VGF,
  - 30 v) a fragment of at least 5 amino acids of human cystatin C,
  - vi) a fragment of at least 5 amino acids of human beta-2-microglobulin,

- vii) a fragment of at least 5 amino acids of human myoglobin (new variant), and
- viii) a fragment of at least 5 amino acids of neurosecretory protein VGF.

- 5        5. Method of investigating the progression of Alzheimer's disease in a subject characterised in that a method of any of claims 1 to 4 is performed with at least two distinct samples drawn from the same subject.
- 10       6. Method of any of claims 1 to 5, wherein detection of said polypeptide(s) is by SELDI-TOF MS.
7. Method of any of claims 1 to 5, wherein specific antibodies or antibodies recognising said polypeptides are used for detection of said polypeptide(s).
- 15       8. Method of any of claims 1 to 7, wherein detection is in a sample comprising CSF, blood, serum, plasma, urine, seminal plasma, nipple fluid, and/or cell extracts of said patient.
- 20       9. A kit comprising polypeptides having a molecular mass of  $4824 \pm 20$  Da, of  $7691 \pm 20$  Da, of  $11787 \pm 20$  Da, of  $11988 \pm 20$  Da, of  $13416 \pm 20$  Da, of  $4769 \pm 20$  Da, of  $6958 \pm 20$  Da, of  $6991 \pm 20$  Da, of  $13412 \pm 20$  Da, of  $13787 \pm 20$  Da, of  $17276 \pm 20$  Da, of  $40437 \pm 20$  Da, of  $6895 \pm 20$  Da, of  $6928 \pm 20$  Da, of  $7691 \pm 20$  Da, of  $7769 \pm 20$  Da, of  $7934 \pm 20$  Da, of  $5082 \pm 20$  Da, of  $6267 \pm 20$  Da, of  $6518 \pm 20$  Da, of  $7274 \pm 20$  Da, and/or of  $8209 \pm 20$  Da.
- 25       10. A kit comprising a fragment of at least 5 amino acids of human cystatin C, a fragment of at least 5 amino acids of human beta-2-microglobulin, a fragment of at least 5 amino acids of human myoglobin (new variant), and a fragment of at least 5 amino acids of neurosecretory protein VGF.